

REMARKS

Claims 108-119 are currently pending in this application.

Claims 108-119 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting based on co-pending Application Nos. 10/618,635 and 09/791,802. Applicants have submitted a Terminal Disclaimer with respect to the above-noted applications. Withdrawal of the double patenting rejections are requested.

Claims 113 and 115 stand rejected under 35 USC § 112, first paragraph, as failing to comply with the written description requirement. The Examiner's comments have been carefully considered. However, it respectfully submitted that the written description requirement has been met by the specification as originally filed.

With respect to claim 115, and in particular the objection to the language "a non-masking zone", the Examiner is referred first to Par. [0049] of the specification, and in particular the following description:

.... each master sound masking hub 14, 16, 18 (and satellite sound masking hub 20) is configured either individually or as a group for a particular physical space, e.g. office, room, zone in an open office, etc. The master sound masking hubs 14, 16, 18 are configured to generate a specific sound masking signal at a specified output level for performing the sound masking in the physical space

The Examiner is also referred to Par [0051], and in particular the following description:

.... the control unit 12 is then used to set/adjust the masking signal spectrum, the masking signal volume, and/or the paging volume for the selected (i.e. addressed) master hub 14, 16, 18 and the satellite sound masking hub 20.....

The description as filed describes physical space as including a "zone" and configuring one or more hubs for the physical space. With respect to a "non-masking zone", it is submitted that one skilled in the art would readily understand the term to mean a zone with no sound masking,

which is a function that can be configured with the sound masking system as implicit from at least the above cited portions of the specification.

With respect to claims 113 and 115, and in particular the term "keypad zone", the term has been changed to "switch zone". It is respectfully submitted that the term "switch zone" is supported by the specification as originally filed. In particular, the Examiner is referred to Par. [0086] and also to Par. [0087] of the specification as filed.

In view of the foregoing, withdrawal of the Examiner's rejections under 35 USC § 112, first paragraph, and under 35 USC § 132(a) is respectfully requested.

In the previous Office Action, claims 108-119 were rejected under 35 USC § 103 as being unpatentable over US Patent 6,888,945 to Horrall, US Patent No. 5,440,644 to Farinelli, and US Patent No. 4,686,693 to Ritter. In the present Office Action, claims 108-118 stand rejected under 35 USC § 103 as being unpatentable over US Patent 4,319,088 to Orfield taken in combination with US Patent Application Publication No. 2002/0072816 to Shdema. It is noted that Orfield has been previously cited and applied, and that Shdema is a newly cited reference. The Examiner's comments have been carefully considered; however, the rejection is respectfully traversed for the reasons as discussed below.

The Examiner contends that Orfield teaches a communication network, a plurality of sound masking units, each having a sound masking signal generator, and a control unit configured to generate one or more control signals including said masking volume signal and said masking frequency signal, as recited in independent claims 108, 114 and 116. The Examiner concedes that Orfield does not expressly disclose a digital processor receiving and transmitting control signals over the communication network, and a control unit having a communication interface for coupling to the communication network for transmitting the control signals to selectively control operation of the plurality of sound masking units.

The Examiner contends that Shdema teaches the deficiencies of Orfield with respect to the claimed invention, and that one skilled in the art would have applied these teachings to Orfield in order to arrive at the present invention as claimed.

It is respectfully submitted that Orfield does not teach or disclose the features or limitations as alleged by the Examiner. In particular, Orfield does not teach or disclose “a communication network”, “a communication interface for receiving a plurality of control signals over said communication network including a masking volume signal and a masking frequency signal” or “a control unit having a communication interface for coupling to said communication network for transmitting said control signals to selectively control operation of said plurality of sound masking units” as recited in independent claim 108. What Orfield discloses is an arrangement of master sound masking units 14 (Fig. 1 and Fig. 3) which can be connected to one or more slave sound masking units 16 (Fig. 2 and Fig. 3) via an “interconnecting cable” 18 (Fig. 3 and Fig. 5). The master sound masking units 14 include a sound masking generator 20 which generates a sound masking output for a dual coil speaker 26. The slave sound masking units 16 comprise a dual coil speaker 62 (Fig. 2). According to Orfield, one or more slave sound masking units 16 can be connected (in a daisy chain configuration) to the master sound masking unit 14. The slave sound masking units 16 do not include a sound masking generator. Instead, the slave sound masking units 16 are configured to simply output the sound masking signal received from the master unit 14 via the speaker 62. Furthermore, there is no capability in the master sound masking units 14 taught by Orfield to selectively control any one of the slave sound masking units 16.

In the context of the present invention, Orfield does not teach or disclose “a communication network” as recited in claim 108. The interconnecting cable 18 simply carries the sound masking output from the master unit 14 to the connected slave unit 16. The interconnecting cable 18 does not carry a plurality of control signals including a masking volume signal and masking frequency signal as recited in claim 108. Orfield does not teach or disclose “a control unit” as recited in claim 108. The master sound masking unit 14 as taught by Orfield does not generate control signals including the masking volume signal and the masking frequency signal as recited in claim 108. As taught by Orfield, the master sound masking unit 14 is limited to generating a sound masking output which can be received by a slave sound masking unit that is connected to the master unit by the interconnecting cable. As recited in claim 108, the sound

masking output signal is not the same as the masking volume signal or the masking frequency signal.

Shdema does not remedy the deficiencies of Orfield. Shdema is directed to an audio system comprising an audio management system 102, an audio source 106 and a plurality of computerized speakers 114. According to Shdema, the audio management system 102 transmits audio streams and speaker audio control data to the computerized speakers 114. As taught by Shdema, the computerized speakers 114 can NOT generate sound masking signals. Shdema provides NO teaching or suggestion of networking and centrally controlling sound masking units.

Also, Orfield provides NO suggestion of networking and controlling sound masking units. As discussed, above the interconnecting cables 18 do not comprise or form a communication network. Furthermore, as taught by Orfield in Col. 7, lines 46-48, the master units 14 of Orfield have dual voice coil speakers that provide the possibility of adding a paging or music signal. Furthermore, Orfield provides adjusting potentiometers such that the paging/music signal may be independently adjusted from the sound masking signal.

It is to be appreciated that paging/music systems and sound masking systems solve fundamentally different problems. Paging/music systems attempt to deliver the same content throughout a workspace. Sound masking systems attempt to suppress the sound within a workspace. However, the workspace includes different zones of ambient noise characteristics, and therefore, each zone requires a different sound masking content. Orfield recognizes this and distinguishes between "paging/music signals" and "sound masking signals". Orfield teaches providing a master unit 14 and a plurality of slave units 16 for each zone. The master unit 14 outputs a sound masking signal tailored to suppress sound within the associated zone. Sound masking is zone specific, and as such, Orfield teaches controlling the sound masking operation at the zone through the use of user manipulated potentiometers.

If one skilled in the art were to modify Orfield as suggested by the Examiner to provide centralized control, this would defeat one of the key features of the Orfield system. It is a well-

known tenet of patent law that where a suggested combination/modification of a reference leads to the destruction of a teaching in the reference, the suggested combination/modification would NOT have been obvious to one skilled in the art. Orfield clearly teaches away from a combination/modification as suggested by the Examiner.

The Examiner suggests that the combination/modification would have been made so that adjustments to the sound masking unit could be made remotely, but the Examiner does not indicate why one skilled in the art would desire this. Instead, this appears to be a disadvantage of the combination/modification. Instead of taking measurements in the zone and directly adjusting sound masking for the zone by using the potentiometers of Orfield, one would now be forced to record the measurements, then travel to the central control location, and then program the central controller to issue instructions, etc.

Furthermore, even if one skilled in the art were to combine Shdema with Orfield, they would not have combined Shdema with Orfield in the manner suggested by the Examiner. Orfield clearly expected that his system would be combined with a paging/music system, and provided for dual voice coils to facilitate this combination. Accordingly, a proper combination of Shdema with Orfield would leave the sound masking elements of Orfield unchanged, and would merely connect the other set of voice coils into the Shdema system. As such, Orfield taken in combination with Shdema does not result in the networked sound masking units under the control of a control unit as recited in the claims.

In view of the foregoing, it is submitted that independent claims 108, 114 and 116 are not obvious in view of Orfield taken in combination with Shdema. Since claims 109-113 and 117-119 are dependent claims, it is submitted that these claims are also not obvious for the same reasons. Withdrawal of the rejection under 35 USC § 103 is respectfully requested.

Claim 119 stands rejected under 35 U.S.C. § 103 as being unpatentable over Orfield in view of Shdema and Ritter (USP 4,686,693). Applicants respectfully traverse this art grounds of rejection.

Ritter does not overcome, and the Examiner does not rely on Ritter for overcoming, the disclosure and suggestion deficiencies of Orfield in view of Shdema discussed above. Therefore, Orfield in view of Shdema can not render claims 108-119 obvious to one skilled in the art.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims in connection with the present application is earnestly solicited.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) hereby petition(s) for a three (3) month extension of time for filing a reply to the outstanding Office Action and submit the required \$1110.00 extension fee herewith.

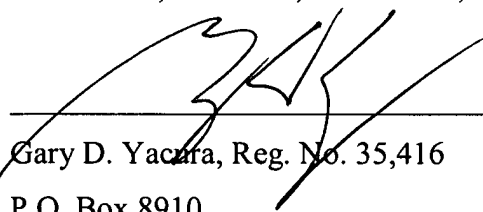
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Gary D. Yacura at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNES, DICKEY, & PIERCE, P.L.C.

By



Gary D. Yacura, Reg. No. 35,416

P.O. Box 8910
Reston, Virginia 20195
(703) 668-8000

GDY/ame